

This procedure will lead you through the process of replacing the blower assembly in a TLS-412300/600 with the quad fan assembly.

Required Tools:

- No. 2 Phillips Screwdriver with 4" shaft
- No. 2 Phillips Screwdriver with 1-1/2" shaft
- Flat Blade Screwdriver

List of Materials:

1. Quad Fan Assembly – Qualstar part number 500700-02-6 (Includes all mounting screws)

Installation Procedure:**Removing the Blower**

1. Remove power from the library: first turn the power switch off and then remove the power cord.
2. Enter the front of the cabinet and direct your attention to the floor panel between the carousels.
 - Remove any magazines that interfere with access to the floor panel.
 - Between the two carousels are eight (8) screws. Refer to Figure 1. Remove the three (3) screws that pass through the floor panel and thread into the Blower Mounting Panel below.

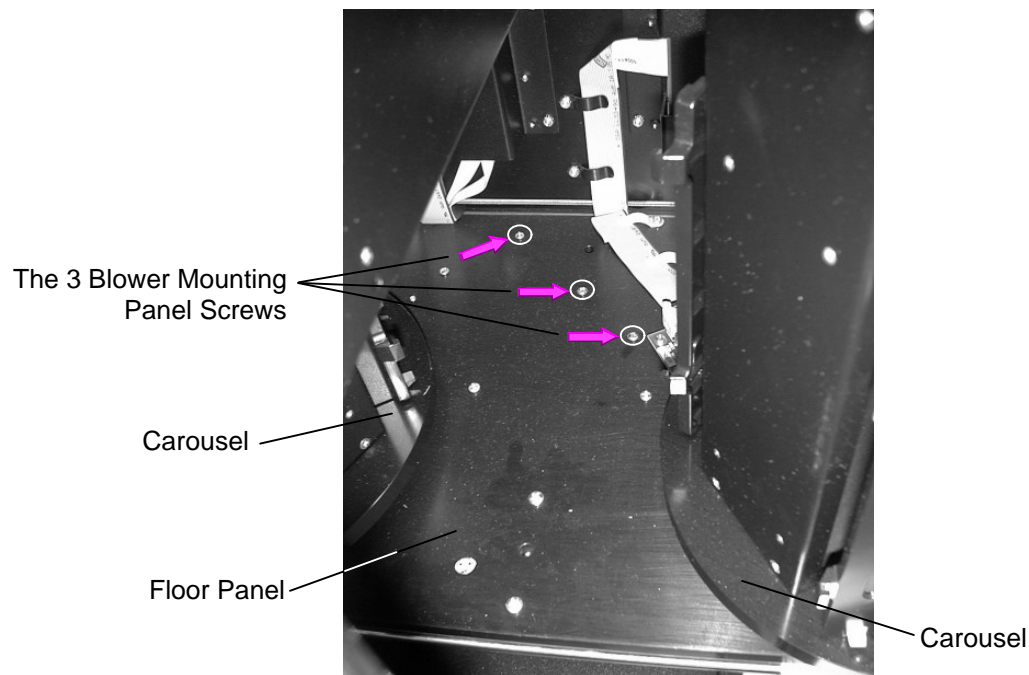


Figure 1 Blower Mounting Panel Screws as seen on the Floor Panel

3. Remove the Drive Access Panel A. Refer to Figure 2.
4. Remove the Air Filter Clamp and the Air Filters. Refer to Figure 2.
5. Remove the eight (8) Air Filter Bracket mounting screws. Refer to Figure 2.

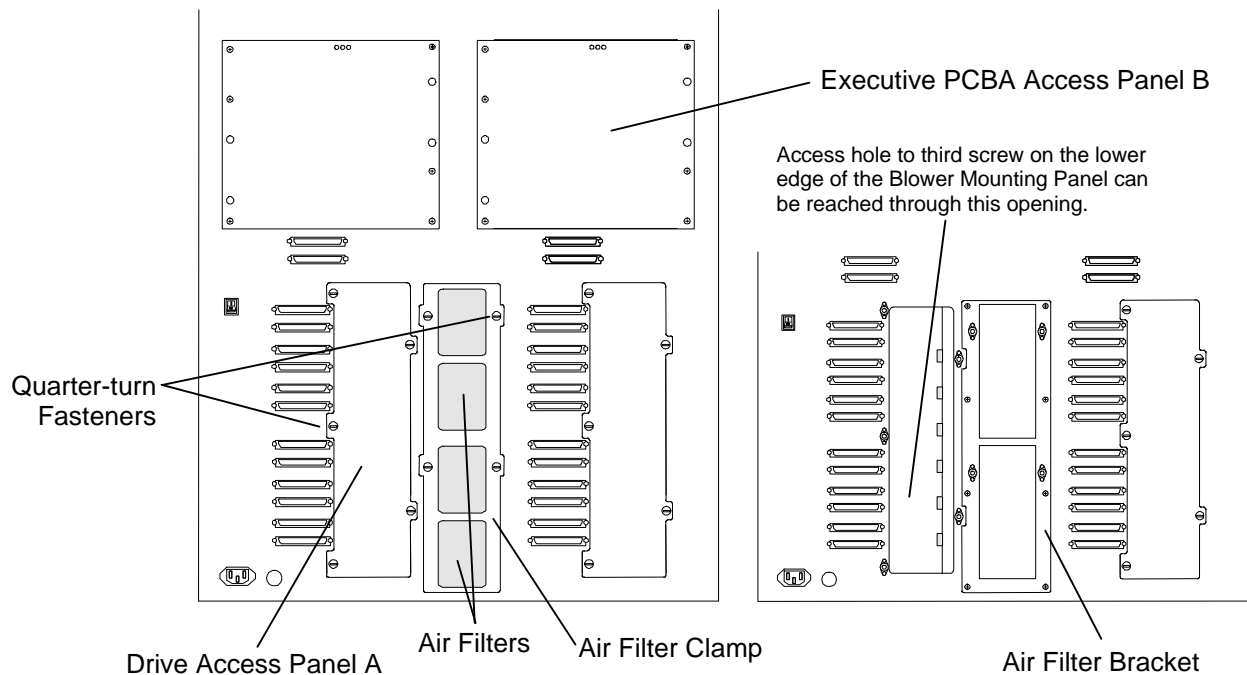


Figure 2 Rear Views of the Library

6. Remove the three (3) screws that hold the lower edge of the Blower Mounting Panel to the angle bracket on the cabinet floor. Refer to Figure 3.
 - Use the short shaft Phillips screwdriver to remove the two screws closest to you.
 - The third screw (farthest away) must be removed with the 4" shaft Phillips screwdriver. Insert the screwdriver from the area behind the right side tape drives (to your left when at the rear of the library). There is an access hole in the panel that separates the tape drives from the blower chamber. Support the blower assembly when removing the third screw.

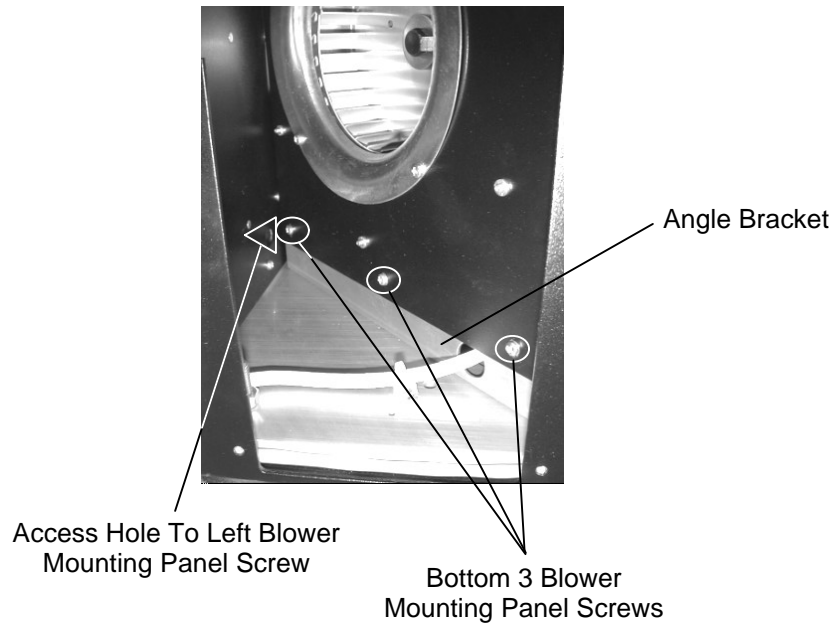


Figure 3 Blower Mounting Panel Screw Locations

7. Turn the Blower Mounting Panel to access the Printed Circuit Board Assembly (PCBA) and unplug the white cable and the gray ribbon cable.

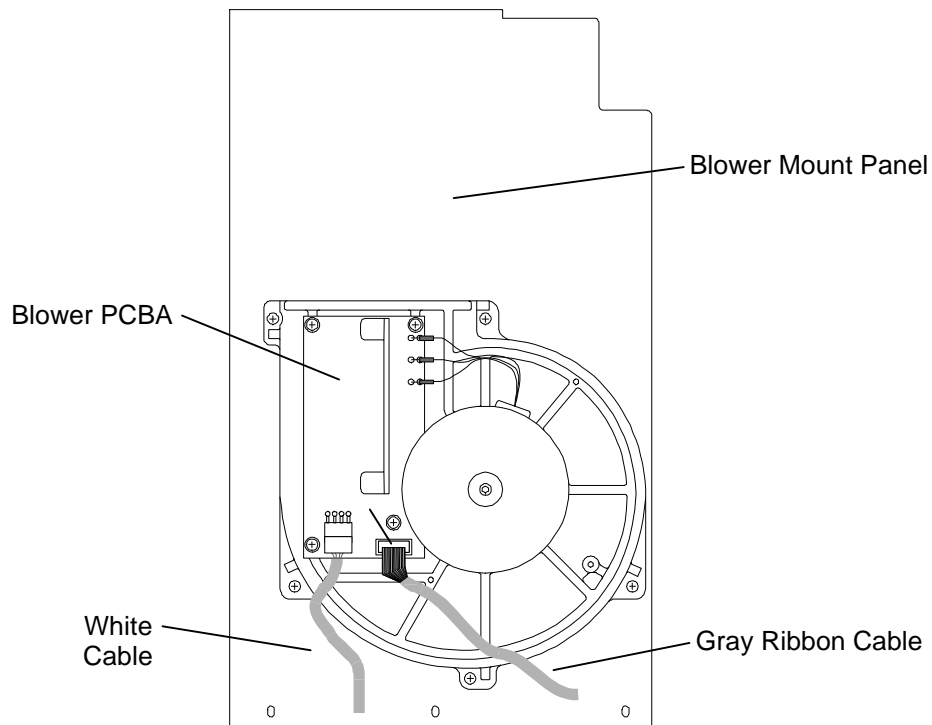


Figure 4 Blower Assembly on the Blower Mounting Panel

8. Carefully remove the blower assembly and the attached Blower Mounting Panel from the library while taking care not to damage any cables that may drop down from above.
9. Remove the three (3) screws that hold the angle bracket to the cabinet floor and then remove the bracket. Refer to Figure 3.

Removing the Blower Power Supply

1. Remove the top panel of the library
 - Open the cabinet door.
 - Remove the 4 screws from the front of the top panel. Refer to Figure 5A.
 - Remove the 5 screws from the back of the top panel. Refer to Figure 5B.

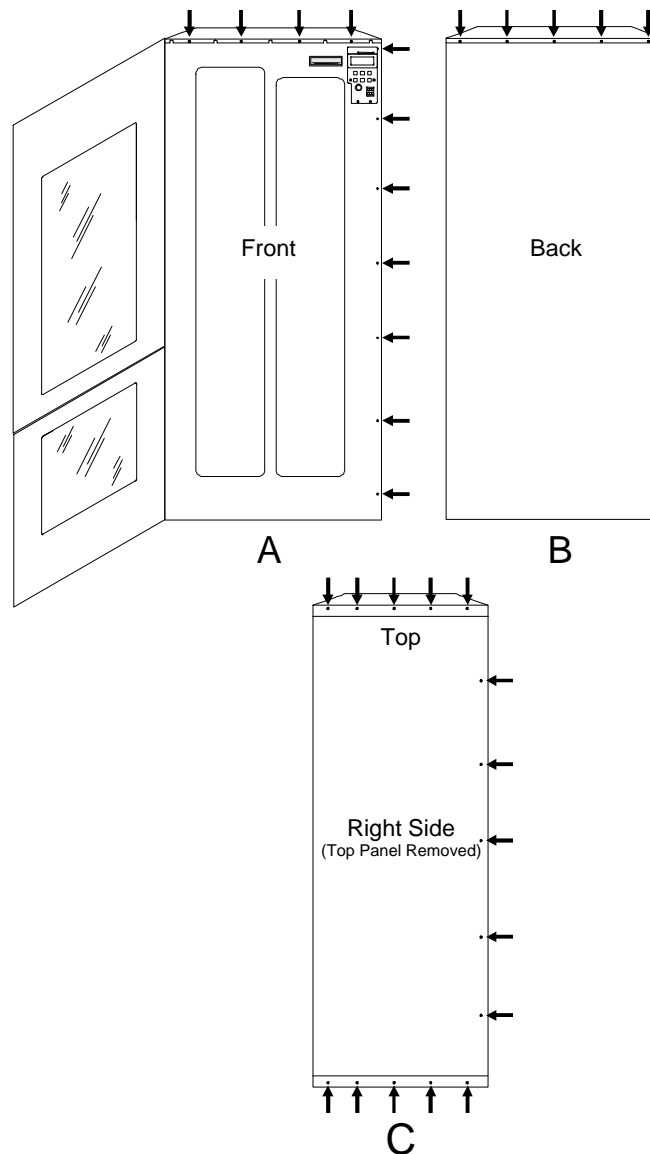


Figure 5 Library Top and Side Panels

2. Remove the right side panel (as seen from the front) of the library.
 - Open the cabinet door.
 - Remove the screws from the front of the side panel as shown in Figure 5A.
 - Remove the screws from the top, bottom and back edges of the side panel as shown in Figure 5C.
3. Locate the Blower Power Supply on the right side of the Library. See Figure 6.

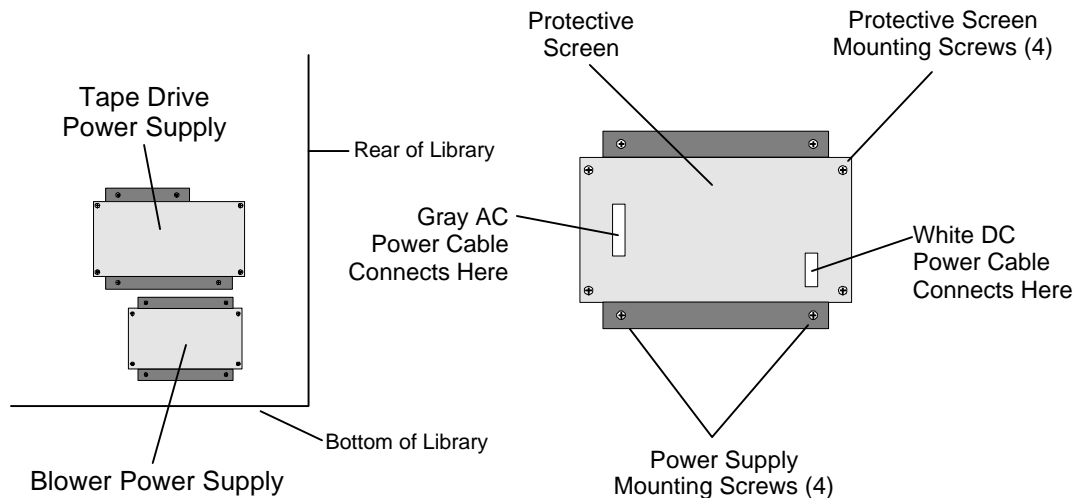


Figure 6 Blower Power Supply

- Remove all four (4) protective screen mounting screws, then remove the protective screen.
- Unplug the gray AC power cable.
- Unplug the white DC power cable and remove the cable from the library.
- Remove all four (4) of the power supply mounting screws.
- Remove the Blower Power Supply from the library.
- Use a plastic tie wrap to secure the loose end of the gray AC power cable away from all metal surfaces.

Installing the Quad Fan Assembly

1. Remove the Executive PCBA Access Panel B. Refer to Figure 2.
2. Insert the Fan Assembly into the rear of the TLS while guiding the red and black fan power wires upwards towards the Executive PCBA. Refer to Figure 7.
 - Thread the red and black fan power wires up through the opening in the floor panel. The opening is about 2.50 inches to the right of the right side edge of the Fan Assembly's opening.
3. Align the Fan Assembly's mounting screw holes with the mounting screw holes in the TLS and then install all
4. Connect both of the red and black fan power wires connectors to the header labeled "12V Fans". Note that these connectors are not polarity-sensitive or keyed, which means that either black wire can go on top. Refer to Figure 7.

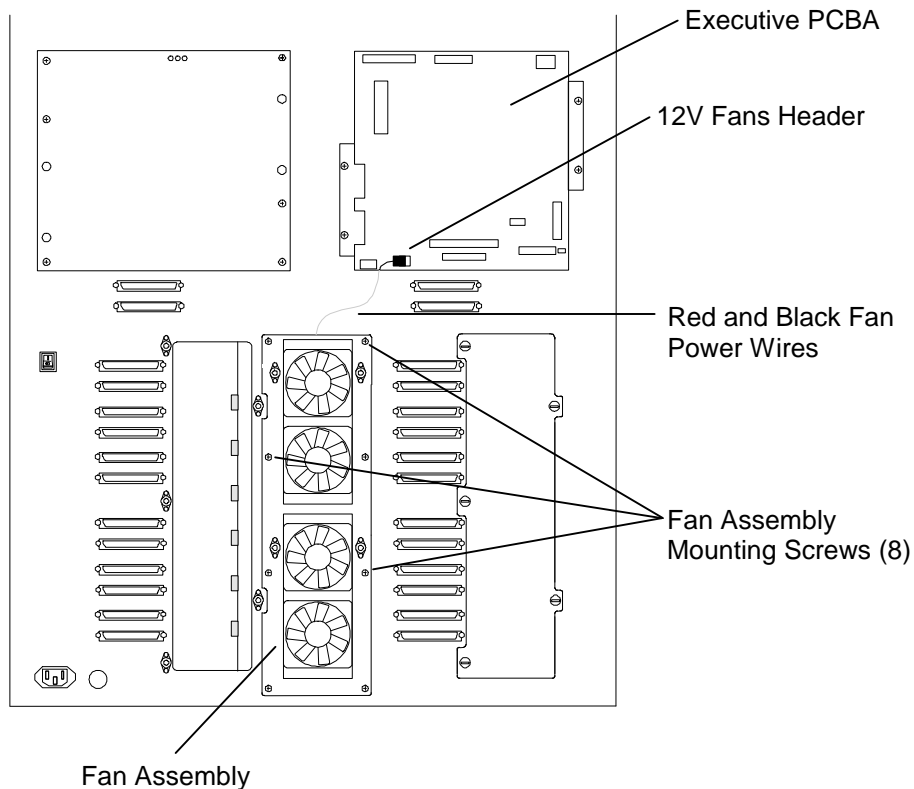


Figure 7 Fan Assembly at Rear of Library

5. Verify that the fans are operating;
 - Reinstall the power cord.
 - Turn on the power switch
 - Look at the fans and make sure all four are turning

NOTE

If the fans are not turning, check to be sure that the red and black fan wires are attached correctly and securely to the "12V Fans" header.

6. Remove power from the library: first turn the power switch off and then remove the power cord.
7. Reinstall the air filters (or install new ones), with the arrows on the edge of the filters' frames pointing **into** the cabinet. Refer to Figure 2.
8. Replace the Air Filter Clamp and secure it by turning the four quarter-turn fasteners clockwise. Refer to Figure 2.
9. Replace the Drive Access Panel A and secure it by turning the four quarter-turn fasteners clockwise. Refer to Figure 2.



10. Replace the right side panel.

- Open the cabinet door.
- Place the side panel on the library.
- Replace the screws removed from the front of the side panel as shown in Figure 5A.
- Replace the screws removed from the top, bottom and back edges of the side panel as shown in Figure 5C.

11. Replace the top panel.

- Open the cabinet door.
- Place the top panel on the library with the scalloped edge facing the front. Refer to Figure 5A.
- Replace the 4 screws removed from the front of the top panel. Refer to Figure 5A.
- Replace the 5 screws removed from the back of the top panel. Refer to Figure 5B.

12. Installation complete.